



# RAMA UNIVERSITY

[www.ramauniversity.ac.in](http://www.ramauniversity.ac.in)

## FACULTY OF ENGINEERING & TECHNOLOGY

### DCS-503 Computer Networks

#### Lecture-35

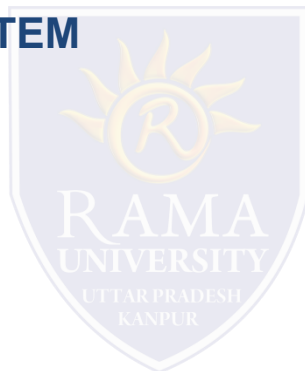
**Mr. Dilip Kumar J Saini**

Assistant Professor

Computer Science & Engineering

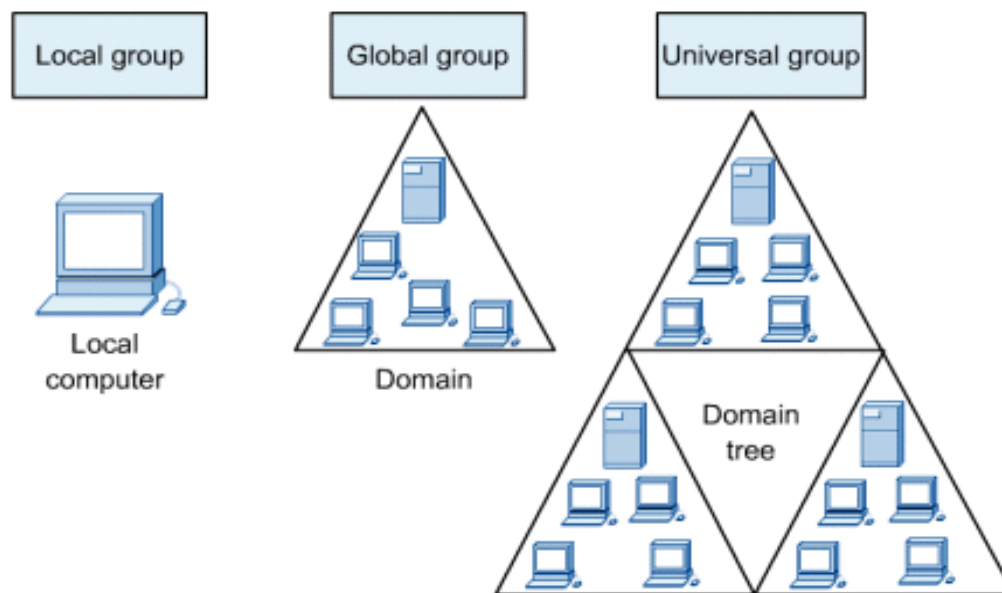
# OUTLINE

- **WINDOWS TERMINOLOGY**
- **WINDOWS NT 4.0**
- **WINDOWS 2000 OPERATING SYSTEM**
- **HISTORY OF LINUX**
- **WHAT IS UNIX?**

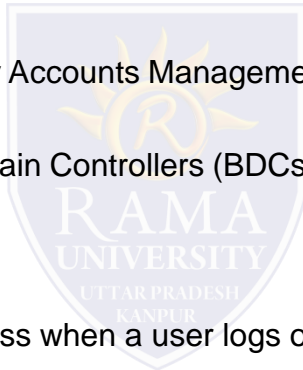


# WINDOWS TERMINOLOGY

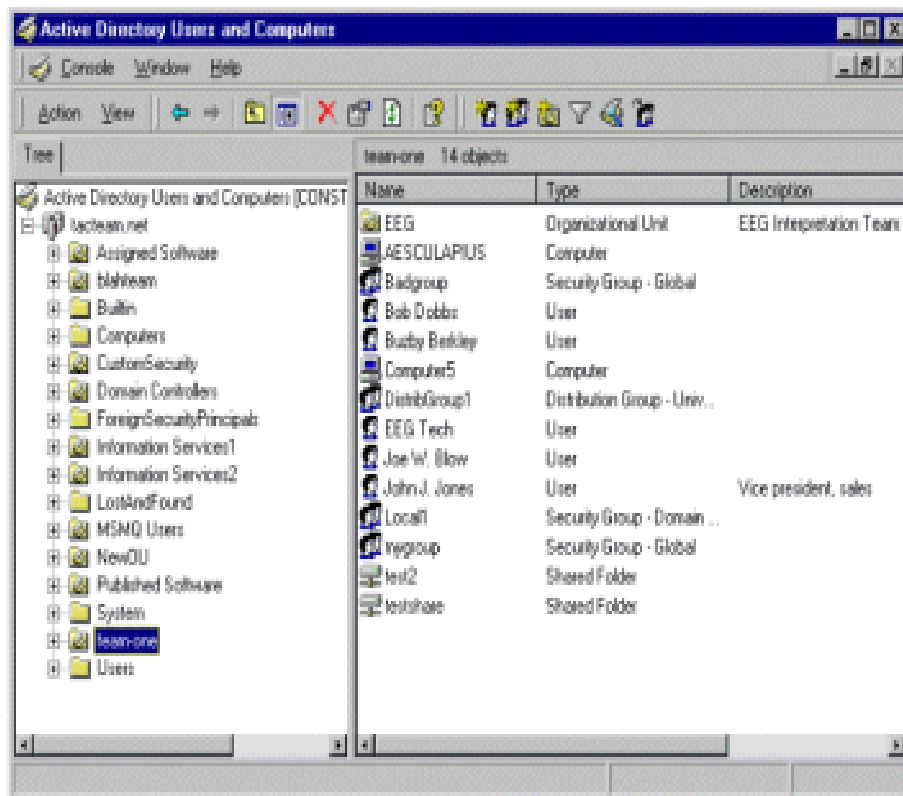
- Windows server-based networks that run Windows NT Server or Windows 2000 Server are based on the concept of the domain.
- A domain is a group of computers and users that serves as a boundary of administrative authority.
- Windows NT domains and Windows 2000 domains, although similar in function, interact with one another differently.



- Each NT domain requires one Primary Domain Controller (PDC).
- This is a "master" server that contains the Security Accounts Management Database (SAM).
- A domain can also have one or more Backup Domain Controllers (BDCs), each of which contains a read-only copy of the SAM.
- The SAM is what controls the authentication process when a user logs onto the domain.




# WINDOWS 2000 OPERATING SYSTEM



- Administrative tasks in Windows 2000 use a common framework, the Microsoft Management Console (MMC).
- This tool uses snap-ins, which are modules that contain the tools for specific administrative functions.
- Users and groups are created and managed with the Active Directory Users (ADUs) and Computers MMC snap-in.
- Administrative authority over each OU can be delegated to a user or group.

# WINDOWS 2000 OPERATING SYSTEM

| NOS                          | Features   | Usage                                     | Price   |
|------------------------------|--|---|---|
| Windows 2000 Professional    | Dual-processor support<br>Limited server capabilities                                | Client workstations,<br>small web servers | Least Expensive   |
| Windows 2000 Server          | Dual-processor support<br>Expanded server capabilities<br>Active Directory, SMP      | Small to Medium sized organizations       |  |
| Windows 2000 Advanced Server | Full server capabilities including applications server<br>Increased hardware support | Large organizations                       |   |
| Windows 2000 .NET Server     | Robust Internet server   | Enterprise Internet                       |   |

▪The Windows 2000 family of operating systems includes:

▪Windows 2000 Professional

▪Windows 2000 Server

▪Windows 2000 Advanced Server

▪The specific needs of the network will determine the best version of Windows 2000 for the installation

# HISTORY OF LINUX

▶ 1980 Dutch professor Andrew Tanenbaum creates an operating system called MINIX to help his students learn the complexities of UNIX.

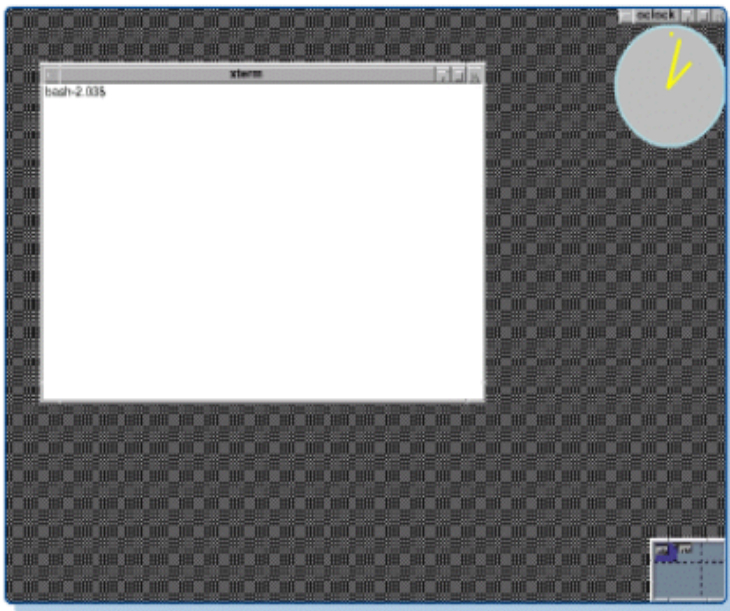
▶ 1991 A student at the University of Helsinki, Linus Torvalds, begins experimenting with ways to make MINIX better.

▶ 1994 Torvalds' work leads to the development and first public release of Linux, version 1.0. A dedicated fan-base erupts consisting primarily of programmers and power users.

▶ Today Linux popularity continues to grow with the release of versions 2.0 and 2.2 distributed by dozens of vendors. Its cost-effective power is increasingly attractive to both businesses and personal users.

- Linux is an operating system similar to UNIX. It runs on many different computers and was first released in 1991.
- Linux is portable, which means versions can be found running on name brand or clone PCs.
- Linux offers many features adopted from other versions of UNIX.

# WHAT IS UNIX?



UNIX is primarily a CLI that is capable of running a GUI front-end known as the X Window System. This figure shows an early version of the X Window System.

- The UNIX NOS was developed in 1969, and it has evolved into many varieties.
- The source code is open, that is, available at no cost to anyone who wants to modify it.
- It is written in C programming language so businesses, academic institutions, and even individuals can develop their own versions.
- There are hundreds of different versions of UNIX.



# Multiple Choice Question

## MUTIPLE CHOICE QUESTIONS:

| Sr no | Question   | Option A             | Option B              | OptionC              | OptionD                |
|-------|--|----------------------|-----------------------|----------------------|------------------------|
| 1     | Frame Relay is cheaper than other _____  | LANs                 | WANs                  | MANs                 | Multipoint Networks    |
| 2     | Frame Relay networks offer an option called _____                                    | Voice Over For Relay | Voice Over Fine Relay | Voice On Frame Relay | Voice Over Frame Relay |
| 3     | There are _____ total features of Frame Relay.                                       | Five                 | Seven                 | Nine                 | Ten                    |
| 4     | Frame relay provides error detection at the _____                                    | physical layer       | data link layer       | network layer        | transport layer        |
| 5     | piece of icon or image on a web page associated with another webpage is called _____ | url                  | hyperlink             | plugin               | extension              |

# REFERENCES

- <http://www.engppt.com/2009/12/networking-fourozan-ppt-slides.html>

